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IN THE UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN FRANCISCO DIVISION

MARIA I. PROHIAS, individually and on behalf)
of all others similarly situated,

Plaintiff,

v.

INTEL CORPORATION, a Delaware
corporation,

Defendant.

No.

CLASS ACTION COMPLAINT
JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Maria I. Prohias, by and through her undersigned attorneys, brings this civil action for damages and injunctive relief on behalf of herself and all others similarly situated against the above-named Defendant, and demanding a trial by jury, complains and alleges as follows:

I. NATURE OF THE ACTION

1. Intel holds a monopoly in a market critical to our economy: microprocessors that run the Microsoft Windows and Linux families of operating systems (hereinafter the “x86 Microprocessor Market”). Intel possesses unmistakable and undeniable market power, its microprocessor revenues accounting for approximately 90% of the worldwide total (and 80% of the units).

2. For over a decade Intel has unlawfully maintained its monopoly by engaging in a relentless, worldwide campaign to coerce customers to refrain from dealing with AMD. Among other things,

- Intel has forced major customers into exclusive or near-exclusive deals;
- it has conditioned rebates, allowances and market development funding on customers’ agreement to severely limit or forego entirely purchases from its major competitor Advanced Micro Devices, Inc. (“AMD”);
- it has established a system of discriminatory, retroactive, first-dollar rebates triggered by purchases at such high levels as to have the practical and intended effect of denying customers the freedom to purchase any significant volume of processors from AMD;
- it has threatened retaliation against customers introducing AMD computer platforms, particularly in strategic market segments;
- it has established and enforced quotas among key retailers effectively requiring them to stock overwhelmingly, if not exclusively, Intel-powered computers, thereby artificially limiting consumer choice;
- it has forced PC makers and technology partners to boycott AMD product launches and promotions;

1 • and it has abused its market power by forcing on the industry technical standards and
2 products which have as their central purpose the handicapping of AMD in the marketplace.

3 3. Intel's economic coercion of customers extends to all levels – from large computer-
4 makers like Hewlett-Packard and IBM to small system-builders to wholesale distributors to
5 retailers such as Circuit City. All face the same choice: accept conditions that exclude AMD or
6 suffer discriminatory pricing and competitively crippling treatment. In this way, Intel has avoided
7 competition on the merits and deprived AMD of the opportunity to stake its prices and quality
8 against Intel's for every potential microprocessor sale.

9 4. Intel's conduct has become increasingly egregious over the past several years as
10 AMD has achieved technological leadership in critical aspects of microprocessor architecture. In
11 April 2003, AMD introduced its Opteron microprocessor, the first microprocessor to take x86
12 computing from 32 bits to 64 bits – an advance that allows computer applications to address
13 exponentially more memory, thereby increasing performance and enabling features not possible
14 with just 32 bits. Unlike Intel's 64-bit architecture of the time (Itanium), the AMD Opteron – as
15 well as its subsequently-introduced desktop cousin, the AMD Athlon64 – offers backward
16 compatibility, allowing PC users to continue using 32-bit software as, over time, they upgrade their
17 hardware. Bested in a technology duel over which it long claimed leadership, Intel increased
18 exploitation of its market power to pressure customers to refrain from migrating to AMD's
19 superior, lower-cost microprocessors.

20 5. Intel's conduct has unfairly and artificially capped AMD's market share, and
21 constrained it from expanding to reach the minimum efficient levels of scale necessary to compete
22 with Intel as a predominant supplier to major customers. As a result, computer manufacturers
23 continue to buy most of their requirements from Intel, continue to pay monopoly prices, continue
24 to be exposed to Intel's economic coercion, and continue to submit to artificial limits Intel places
25 on their purchases from AMD. With AMD's opportunity to compete thus constrained, the cycle
26 continues, and Intel's monopoly profits continue to flow.

27 6. Consumers ultimately foot this bill, in the form of inflated PC prices and the loss of
28 freedom to purchase computer products that best fit their needs. Society is worse off for lack of

1 innovation that only a truly competitive market can drive. The Japanese Government recognized
 2 these competitive harms when on March 8, 2005, its Fair Trade Commission (the “JFTC”)
 3 recommended that Intel be sanctioned for its exclusionary misconduct directed at AMD. Intel
 4 chose not to contest the charges.

5 7. In this proposed class action, Plaintiff, on behalf of a class of purchasers of Intel
 6 microprocessors, seeks injunctive relief and compensatory damages arising from Intel’s restraint of
 7 trade and unfair business practices.

8 **II. JURISDICTION AND VENUE**

9 8. The Court has subject matter jurisdiction under 28 U.S.C. § 1337 (commerce and
 10 antitrust regulation) and 28 U.S.C. § 1331 (federal question), as this action arises under Section 2
 11 of the Sherman Act, 15 U.S.C. § 2, and Sections 4 and 16 of the Clayton Act, 15 U.S.C. §§ 15(a)
 12 and 26. The Court has supplemental subject matter jurisdiction of the pendent state law claims
 13 under 28 U.S.C. § 1367.

14 9. Venue is proper because Intel Corporation resides and is found in this district within
 15 the contemplation of 28 U.S.C. § 1391 (b) and (c) and as provided in Sections 4 and 12 of the
 16 Clayton Act, 15 U.S.C. §§ 15 and 22.

17 **III. THE PARTIES**

18 10. Plaintiff Maria I. Prohias is a resident of, Miami, Florida and purchased a computer
 19 with an Intel microprocessor and was injured as a result of Defendant’s illegal conduct.

20 11. Defendant INTEL CORPORATION is a Delaware corporation with its principal
 21 executive offices at Santa Clara, California, and it conducts business both directly and through
 22 wholly-owned and dominated subsidiaries worldwide. Intel and its subsidiaries design, produce,
 23 and sell a wide variety of microprocessors, flash memory devices, and silicon-based products for
 24 use in the computer and communications industries worldwide.

25 **IV. CLASS ACTION ALLEGATIONS**

26 12. Plaintiff brings this suit as a class action pursuant to Rules 23(b)(2) and 23(b)(3) of
 27 the Federal Rules of Civil Procedure, on behalf of herself and a Plaintiff Class (“the Class”)
 28 composed of and defined as follows:

All persons and entities residing in the United States who from June 29, 2001 through the present, purchased a microprocessor in the United States indirectly from the Defendant. Specifically excluded from this Class are the Defendant; the officers, directors or employees of the Defendant; any entity in which any has a controlling interest; and any affiliate, legal representative, heir or assign of the Defendant. Also excluded are any federal, state or local governmental entities, any judicial officer presiding over this action and the members of his/her immediate family and judicial staff, and any juror assigned to this action.

13. This action has been brought and may be properly maintained as a class action pursuant to Rule 23 of the Federal Rules of Civil Procedure for the following reasons:

a. The Class is ascertainable and there is a well-defined community of interest among the members of the Class;

b. Based upon the nature of the trade and commerce involved and the number of indirect purchasers of Intel-powered computers, Plaintiff believes that the members of the class number in the thousands, and therefore is sufficiently numerous that joinder of all Class members is not practicable;

c. Plaintiff's claims are typical of the claims of the members of the Class because Plaintiff indirectly purchased an Intel microprocessor from the Defendant or its co-conspirators, and therefore Plaintiff's claims arise from the same common course of conduct giving rise to the claims of the members of the Class and the relief sought is common to the Class;

d. The following common questions of law or fact, among others, exist as to the members of the Class:

i. whether Defendant formed and operated a combination or conspiracy to fix, raise, maintain or stabilize the prices of, or allocate the market for, microprocessors;

ii. whether the combination or conspiracy caused microprocessor prices to be higher than they would have been in the absence of Defendant's conduct;

iii. the operative time period of Defendant's combination or conspiracy;

iv. whether Defendant's conduct caused injury to the business or property of Plaintiff and the members of the Class;

1 v. the appropriate measure of the amount of damages suffered by the
2 Class;

3 vi. whether Defendant's conduct violates Section 1 of the Sherman Act;

4 vii. whether Defendant's conduct violates Sections 16720 and 17200 of
5 the California Business and Professions Code;

6 viii. whether Defendant's conduct violates the antitrust, unfair
7 competition, and consumer protection laws of the other states as alleged below; and

8 e. These and other questions of law or fact which are common to the members
9 of the Class predominate over any questions affecting only individual members of the Class;

10 f. After determination of the predominate common issues identified above, if
11 necessary or appropriate, the Class can be divided into logical and manageable subclasses;

12 g. Plaintiff will fairly and adequately protect the interests of the Class in that
13 Plaintiff has no interests that are antagonistic to other members of the Class and has retained
14 counsel competent and experienced in the prosecution of class actions and antitrust litigation to
15 represent herself and the Class;

16 h. A class action is superior to other available methods for the fair and efficient
17 adjudication of this litigation since individual joinder of all damaged Class members is impractical.
18 The damages suffered by individual Class members are relatively small, given the expense and
19 burden of individual prosecution of the claims asserted in this litigation. Thus, absent the
20 availability of class action procedures, it would not be feasible for Class members to redress the
21 wrongs done to them. Even if the Class members could afford individual litigation, the court
22 system could not. Further, individual litigation presents the potential for inconsistent or
23 contradictory judgments and would greatly magnify the delay and expense to all parties and to the
24 court system. Therefore, the class action device presents far fewer case management difficulties
25 and will provide the benefits of unitary adjudication, economy of scale and comprehensive
26 supervision by a single court;

1 i. Defendant has acted, and refused to act, on grounds generally applicable to
2 the Class, thereby making appropriate final injunctive relief with respect to the Class as a whole;
3 and

4 j. In the absence of a class action, Defendant would be unjustly enriched
5 because it would be able to retain the benefits and fruits of its wrongful conduct.

6 14. The Claims in this case are also properly certifiable under the laws of the State of
7 California, and of the other individual states identified below in the Claims for Relief.

8 V. FACTUAL BACKGROUND

9 A. Early History

10 15. The brain of every computer is a general-purpose microprocessor, an integrated
11 circuit capable of executing a menu of instructions and performing requested mathematical
12 computations at very high speed. Microprocessors are defined by their instruction set – the
13 repertoire of machine language instructions that a computer can follow. So, too, are computer
14 operating systems – software programs that perform the instructions in the set allowing the
15 computer to perform meaningful tasks. The first generation of microprocessors, which were
16 capable of handling 4 and then later 8 bits of data simultaneously, evolved to provide 16-bit
17 capability (the original DOS processors), then sometime later a 32-bit capability (allowing the use
18 of advanced graphical interfaces such as later versions of Windows), and now 64-bit capability.

19 16. When IBM defined the original PC standards in the early 1980s, it had available to
20 it a variety of microprocessors, each with its own instruction set – among these were
21 microprocessors developed by Motorola, Zilog, National Semiconductor, Fairchild, Intel and
22 AMD. IBM opted for the Intel architecture, which utilized what became known as the x86
23 instruction set (after Intel's naming convention for its processors, *i.e.*, 8086, 80186, 80286, 80386),
24 and a compatible operating system offered by Microsoft, known as DOS. Unwilling to be
25 consigned to a single source of supply, however, IBM demanded that Intel contract with another
26 integrated circuit company and license it to manufacture x86 chips as a second source. AMD,
27 which had worked with Intel before in supplying microprocessors, agreed to abandon its own,
28 competing architecture, and it undertook to manufacture x86 chips as a second source of supply.

1 Assured that it would not be dependent upon a monopoly supplier of x86 chips, IBM introduced
2 the PC in August 1981 – and its sales exploded.

3 17. Although an arbitrator later found that “AMD’s sponsorship helped propel Intel
4 from the chorus line of semiconductor companies into instant stardom,” Intel soon set out to
5 torpedo the 1982 AMD-Intel Technology Exchange Agreement (the “Agreement”) by which each
6 would serve as a second source for products developed by the other. For example, Intel was
7 required by the Agreement to send AMD timely updates of its second generation 80286 chip.
8 Instead, in a “deliberate[]” effort “to shackle AMD progress,” Intel sent AMD information
9 “deliberately incomplete, deliberately indecipherable and deliberately unusable by AMD
10 engineers.” The conduct was, in the arbitrator’s words, “inexcusable and unworthy.” And it was
11 not isolated. Intel elsewhere tried to “sabotage” AMD products, engaged in “corporate extortion”
12 and demonstrated a near-malevolent determination “to use all of its economic force and power on a
13 smaller competitor to have its way.”

14 18. In another underhanded effort to stifle AMD’s business, Intel decided in 1984 that,
15 the agreement between the parties notwithstanding, Intel would become the sole-source for the
16 promising 80386 chip. To fully realize its objective, Intel engaged in an elaborate and insidious
17 scheme to mislead AMD (and the public) into erroneously believing that AMD would be a second
18 source, thereby keeping AMD in the Intel “competitive camp” for years. This duplicitous strategy
19 served a broader purpose than simply preventing AMD from competing with Intel. Customers’
20 perception that AMD would continue to serve as Intel’s authorized second source was essential to
21 Intel’s aim of entrenching the x86 family of microprocessors as the industry standard (as it had
22 been essential to IBM’s original introduction of the PC). Intel was well aware that if computer
23 manufacturers knew Intel intended to sole source its 32-bit product, they would be motivated to
24 select alternative products produced by companies offering second sources. Intel could not
25 preserve the appearance that AMD would second source the 386 if it terminated the contract or
26 otherwise disclosed its actual intent. Thus, Intel stalled negotiations over product exchanges, while
27 at the same time allowing AMD to believe that it could ultimately obtain the 386. This injured
28

1 competition by deterring and impeding serious competitive challenges to Intel and directly injured
2 AMD by depriving it of the revenues and profits it would have earned from such a challenge.

3 19. Intel implemented this secret plan for the purpose of acquiring and maintaining an
4 illegal monopoly in the x86 line of microprocessors, which it did by at least 1987. As was its plan,
5 Intel's conduct drained AMD's resources, delayed AMD's ability to reverse-engineer or otherwise
6 develop and manufacture competitive products, and deterred AMD from pursuing relationships
7 with other firms. In so doing, Intel wrongfully secured the benefit of AMD's marketing skills and
8 talent in support of the x86 line of microprocessors and related peripherals and secured the benefit
9 of substantial competitively sensitive AMD information regarding its product development plans.
10 When AMD petitioned to compel arbitration in 1987 for Intel's breach and bad faith, the arbitrator
11 took notice of Intel's anticompetitive design: "In fact, it is no fantasy that Intel wanted to blunt
12 AMD's effectiveness in the microprocessor marketplace, to effectively remove AMD as a
13 competitor."

14 20. In 1992, after five years of litigation, the arbitrator awarded AMD more than \$10
15 million plus prejudgment interest and a permanent, nonexclusive and royalty-free license to any
16 Intel intellectual property embodied in AMD's own 386 microprocessor, including the x86
17 instruction set. Confirmation of the award was upheld by the California Supreme Court two years
18 later. In bringing the litigation to a close, the arbitrator hoped that by his decision, "the
19 competition sure to follow will be beneficial to the parties through an expanded market with
20 appropriate profit margins and to the consumer worldwide through lower prices." Not for the first
21 time, and certainly not for the last, Intel's anticompetitive zeal was woefully underestimated.

22 **B. AMD Moves from Second Source to Innovator**

23 21. Shortly after confirmation of the award, AMD settled its outstanding disputes with
24 Intel in a 1995 agreement which gave AMD a shared interest in the x86 instruction set but required
25 it to develop its own architecture to implement those instructions. The settlement had the
26 unintended benefit of forcing AMD to reinvent itself. Beginning in the late 1990s, AMD
27 committed its resources to innovating not just to be different, but to deliver solutions of greatest
28 benefit to its customers. Going its own way proved beneficial: AMD's first x86 chip without Intel

1 pin-compatibility, the Athlon microprocessor delivered in 1999, marked the first (but not last) time
2 AMD was to leapfrog Intel technologically and beat it to market with a new generation Windows
3 microprocessor (and break the 1GHz speed barrier to boot).

4 22. But AMD's biggest breakthrough came four years later when it introduced an
5 extension of x86 architecture that took Windows processors into the realm of 64-bit computing.
6 Unlike Intel, which invested billions in its Itanium microprocessor and a new, uniquely 64-bit
7 proprietary instruction set (which, because it was proprietary, would have been a game-ending
8 development for AMD had it become the industry standard), AMD undertook to supplement the
9 x86 instructions to accommodate 64-bit processing while allowing 32-bit software to be run as
10 well. AMD's efforts culminated when, in April 2003, it brought to market its Opteron
11 microprocessor for servers (the workhorse computers used by businesses to run corporate
12 networks, e-commerce websites and other high-end, computationally-intense applications).
13 Opteron was the industry's first x86 backward compatible 64-bit chip. Six months later, AMD
14 launched the Athlon64, a backward compatible 64-bit microprocessor for desktops and mobile
15 computers.

16 23. The computing industry hailed AMD's introduction of 64-bit computing as an
17 engineering triumph. Said *Infoworld* in its August 27, 2004, issue,

18 You just gotta love a Cinderella story. . . . AMD's rapid rise from
19 startup to \$5 billion semiconductor powerhouse is, as Humphrey
20 Bogart's English teacher once said, the stuff of which dreams are
21 made. . . . In the process, AMD has become known as the company
22 that kept Intel honest, the Linux of the semiconductor world. . . .
23 After decades of aping Intel architectures, the AMD64 architecture,
rooted in Opteron and Athlon 64 processors, has actually been
imitated by Intel in the form of Nocona, Intel's 64-bit version of
Xeon. In a stunning reversal of fortune, Intel was forced to build that
chip because Opteron was invading a server market that the Intel
Itanium was supposed to dominate.

24 In what represented a paradigm shift in the microprocessor world, Microsoft endorsed AMD's 64-
25 bit instruction set and announced that Windows would support it. As noted by *Infoworld*, Intel
26 then copied AMD's technology for its own 64-bit offerings – an event that poignantly marked
27 AMD's technological emergence. Intel still has yet to catch up.

24. AMD has since extended its AMD64 technology to the balance of AMD's microprocessor line-up (which now includes AMD Athlon 64, AMD Athlon 64 FX, Mobile AMD Athlon 64, AMD Sempron, and AMD Turion64 products). Owing also to AMD's pioneering developments in dual-core processors and its introduction of an improved architecture that speeds up microprocessor communications with memory and input/output devices, AMD has seized technological leadership in the microprocessor industry. Its innovation has won for it over 70 technology leadership and industry awards and, in April 2005, the achievement of being named "Processor Company of 2005" at, to Intel's embarrassment, an Intel-sponsored industry awards show.

25. Tellingly, AMD's market share has not kept pace with its technical leadership. Intel's misconduct is the reason. Intel has unlawfully maintained the monopoly IBM bestowed on it and systematically excluded AMD from any meaningful opportunity to compete for market share by preventing the companies that buy chips and build computers from freely deploying AMD processors; by relegating AMD to the low-end of the market; by preventing AMD from achieving the minimum scale necessary to become a full-fledged, competitive alternative to Intel; and by erecting impediments to AMD's ability to increase its productive capacity for the next generation of AMD's state of the art microprocessors. Intel's exclusionary acts are the subject of the balance of this complaint.

VI. THE X86 PROCESSOR INDUSTRY

A. Competitive Landscape

26. The x86 versions of Windows and Linux, the two operating systems that dominate the business and consumer computer worlds, have spawned a huge installed base of Windows- and Linux-compatible application programs that can only run the x86 instruction set. This has given Intel effective ownership of personal computing. Although other microprocessors are offered for sale, the non-x86 microprocessors are not reasonably interchangeable with x86 microprocessors because none can run the x86 Windows or Linux operating systems or the application software written for them.

27. The relevant product market is x86 microprocessors because a putative monopolist in this market would be able to raise the prices of x86 microprocessors above a competitive level without losing so many customers to other microprocessors as to make this increase unprofitable. While existing end-users can theoretically shift to other operating system platforms, high switching costs associated with replacing existing hardware and software make this impractical. Further, the number of new, first-time users who could choose a different operating-system platform is too small to prevent an x86 microprocessor monopolist from imposing a meaningful price increase for a non-transitory period of time. Computer manufacturers would also encounter high switching costs in moving from x86 processors to other architectures, and no major computer maker has ever done it. In short, demand is not cross-elastic between x86 microprocessors and other microprocessors at the competitive level.

28. The relevant geographic market for x86 microprocessors is worldwide. Intel and AMD compete globally; PC platform architecture is the same from country to country; microprocessors can be easily and inexpensively shipped around the world, and frequently are; and the potential for arbitrage prevents chipmakers from pricing processors differently in one country than another.

29. Intel dominates the worldwide x86 Microprocessor Market. According to published reports, over the past several years it has consistently achieved more than a 90% market share as measured by revenue, while AMD's revenue share has remained at approximately 9%, with all other microprocessor manufacturers relegated to less than 1%. Intel has captured at least 80% of x86 microprocessor unit sales in seven of the last eight years. Since 1999, AMD's worldwide volume share has hovered at 15%, only once penetrating barely the 20% level. The following chart is illustrative:

x86 Worldwide CPU Unit Market Share

	1997	1998	1999	2000	2001	2002	2003	2004
Intel	85.0%	80.3%	82.2%	82.2%	78.7%	83.6%	82.8%	82.5%
AMD	7.3%	11.9%	13.6%	16.7%	20.2%	14.9%	15.5%	15.8%
Others	7.5%	7.9%	4.2%	1.1%	1.1%	1.4%	1.7%	1.7%

1 30. Intel's x86 family of microprocessors no longer faces any meaningful competition
2 other than from AMD. National Semiconductor acquired Cyrix in 1997 but shuttered it less than
3 two years later. At the beginning of this year only two other x86 chip makers remained, Via
4 Technologies, Inc. and Transmeta Corporation – which together account for less than 2% of the
5 market. Transmeta has since announced its intention to cease selling x86 microprocessors, and Via
6 faces dim prospects of growing its market share to a sustaining level.

7 31. Intel is shielded from new competition by huge barriers to entry. A chip fabrication
8 plant ("fab") capable of efficiently mass-producing x86 microprocessors carries a price tag of at
9 least \$2.5 to \$3.0 billion. In addition, any new entrant would need the financial wherewithal to
10 underwrite the billions more in research and development costs to design a competing x86
11 microprocessor and to overcome almost insurmountable IP and knowledge barriers.

12 **B. Customers for x86 Microprocessors**

13 32. Annual worldwide consumption of x86 microprocessors currently stands at just over
14 200 million units per year and is expected to grow by 50% over the remainder of the decade.
15 Relatively few microprocessors are sold for server and workstation applications (8.75 million in
16 2004), but these command the highest prices. Most x86 microprocessors are used in desktop PCs
17 and mobile PCs, with desktops currently outnumbering mobile by a margin of three to one. Of the
18 total worldwide production of computers powered by x86 microprocessors, 32% are sold to U.S.
19 consumers; U.S. sales of AMD-powered computers account for 29% of AMD's production.

20 33. The majority of x86 microprocessors are sold to a handful of large OEMs (original
21 equipment manufacturers), highly visible companies recognized throughout the world as the
22 leading computer makers. Regarded by the industry as "Tier One" OEMs over most product
23 categories are: Hewlett-Packard ("HP"), which now also owns Compaq Computer; Dell, Inc.; IBM,
24 which as of May 1, 2005, sold its PC (but not server) business to Lenovo; Gateway/eMachines; and
25 Fujitsu/Fujitsu Siemens, the latter a Europe-based joint venture. Toshiba, Acer, NEC and Sony are
26 also commonly viewed as Tier One OEMs in the notebook segment of the PC market. HP and Dell
27 are the dominant players, collectively accounting for over 30% of worldwide desktop and mobile
28 sales, and almost 60% of worldwide server sales. Both are U.S.-based companies, as are IBM and

1 Gateway/eMachines; and all but Gateway have U.S. manufacturing operations (as does Sony,
2 which operates a North American production facility in San Diego).

3 34. Worldwide, the Tier One OEMs collectively account for almost 80% of servers and
4 workstations (specialty high-powered desktops), more than 40% of worldwide desktop PCs, and
5 over 80% of worldwide mobile PCs. According to industry publications, unit market share in 2004
6 among the Tier One OEMs were as follows:

7 **OEM Market Shares – 2004**

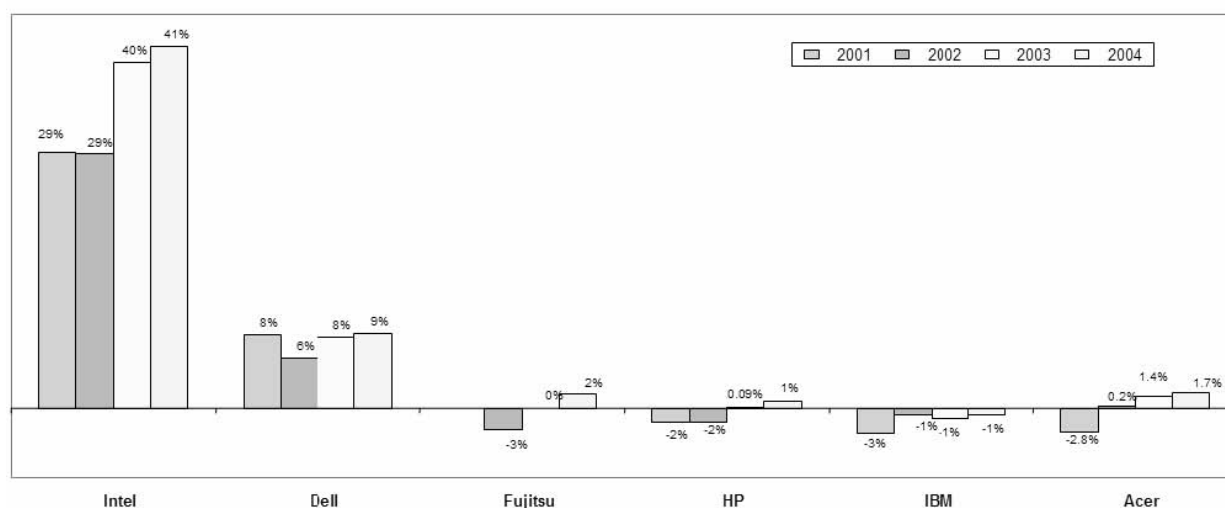
8 Company	Server/WS	Desktop	Mobile
9 Hewlett-Packard	29.86%	.69%	.23%
10 IBM/Lenovo	28.34%	16.18%	17.27%
11 Fujitsu/Siemens	3.70%	2.83%	6.88%
12 Acer	0.81%	1.85%	8.53%
13 Toshiba	0.31%	0.05%	12.73%
14 NEC	2.06%	2.02%	4.50%
15 Sony	—	0.76%	4.23%
16 Gateway/eMachines	0.16%	2.48%	1.45%
17 Total	79.70%	43.55%	81.02%

18 35. The balance of x86 production is sold to smaller system builders and to independent
19 distributors. The latter, in turn, sell to smaller OEMs, regional computer assemblers, value-added
20 resellers and other, smaller distributors. Currently, distributors account for over half of AMD's
21 sales.

22 36. OEMs have adopted a variety of business models, including sales directly to
23 customers through web-based e-commerce, sales through company-employed sales staffs (who
24 target IT professionals and Fortune 1000 companies) and sales through a network of independent
25 distributors (who focus on smaller business customers). With the exception of Dell, which markets
26 to consumers only directly (mostly over the internet), most OEMs also sell through retail chains.
27 Intel and AMD compete not only to have OEMs incorporate their microprocessors into their retail
28 platforms but also to convince retailers to allocate shelf-space so that the platforms containing their
respective microprocessors can be purchased in the retailers' stores.

37. Through its economic muscle and relentless marketing – principally its “*Intel Inside*” and “*Centrino*” programs which financially reward OEMs for branding their PCs as Intel machines – Intel has transformed the OEM world. While once innovative companies themselves, the OEMs have largely become undifferentiated distributors of the Intel platform, offering “*Intel Inside*” and “*Centrino*” computers largely indistinguishable from those of their rivals. As their products have become commoditized, the Tier One OEMs operate on small or negative margins, and, as shown in the following chart, the overwhelming portion of PC profit flows to Intel.

Operating Margins 2001-04 – Intel vs. OEMs



38. This profit drain has left OEMs and others in the distribution chain in a quarter-to-quarter struggle to eke out even a modest return on their assets, thereby making them continually susceptible to Intel’s economic coercion, which is described next.

VII. INTEL’S UNLAWFUL PRACTICES

39. Intel has maintained its x86 microprocessor monopoly by deploying a host of financial and other exclusionary business strategies that in effect limit its customers’ ability and/or incentive to deal with AMD. Although differing from customer to customer and segment to segment, the Intel arsenal includes direct payments in return for exclusivity and near-exclusivity; discriminatory rebates, discounts and subsidies conditioned on customer “loyalty” that have the practical and intended effect of creating exclusive or near-exclusive dealing arrangements; threats of economic retaliation against those who give, or even contemplate giving, too much of their business to AMD, or who refuse to limit their AMD business to Intel-approved models, brands,

1 lines and/or sectors, or who cooperate too closely with AMD's promotion of its competitive
2 processors; and misuse of industry standards-setting processes so as to disadvantage AMD
3 products in the marketplace.

4 40. Intel's misconduct is global. It has targeted both U.S. and offshore customers at all
5 levels to prevent AMD from building market share anywhere, with the goal of keeping AMD small
6 and keeping Intel's customers dependent on Intel for very substantial amounts of product. In this
7 way, OEMs remain vulnerable to continual threats of Intel retaliation, AMD remains capacity-
8 constrained, the OEMs remain Intel-dependent, and Intel thereby perpetuates its economic hold
9 over them, allowing it to continue to demand that customers curtail their dealings with AMD. And
10 the cycle repeats itself: by unlawfully exploiting its existing market share, Intel is impeding
11 competitive growth of AMD, thereby laying foundation for the next round of foreclosing actions
12 with the effect that AMD's ability to benefit from its current technological advances is curtailed to
13 the harm of potential customers and consumers.

14 41. The following is not intended as an exhaustive catalog of Intel's misconduct, or a
15 complete list of its unlawful acts, but only as examples of the types of improper exclusionary
16 practices that Intel has employed.

17 **1. Practices Directed At OEMs**

18 **a. Exclusive and Near-Exclusive Deals**

19 42. **Dell.** In its history, Dell has not purchased a single AMD x86 microprocessor
20 despite acknowledging Intel shortcomings and customer clamor for AMD solutions, principally in
21 the server sector. As Dell's President and CEO, Kevin Rollins, said publicly last February:

22 Whenever one of our partners slips on either the economics or
23 technology, that causes us great concern. . . . For a while, Intel
24 admittedly slipped technologically and AMD had made a step
forward. We were seeing that in customer response and requests.

25 43. Nonetheless, Dell has been and remains Intel-exclusive. According to industry
26 reports, Intel has bought Dell's exclusivity with outright payments and favorable discriminatory
27 pricing and service. In discussions about buying from AMD, Dell executives have frankly
28 conceded that they must financially account for Intel retribution in negotiating pricing from AMD.

1 44. **Sony.** With the introduction of its Athlon microprocessor in 1999, AMD began to
2 make notable inroads into Intel's sales to major Japanese OEMs, which export PCs internationally
3 including into the U.S. By the end of 2002, AMD had achieved an overall Japanese unit market
4 share of approximately 22%. To reverse the erosion of its business, in 2003 Intel paid Sony
5 multimillion dollar sums, disguised as discounts and promotional support, in exchange for absolute
6 microprocessor exclusivity. Sony abruptly cancelled an AMD Mobile Athlon notebook model.
7 Soon thereafter, it cancelled plans to release AMD Athlon desktop and notebook computers. As a
8 result, AMD's share of Sony's business dropped from 23% in 2002 to 8% in 2003, and then to 0%,
9 where it remains today. In proceedings brought by the JFTC, Intel has accepted the JFTC charges
10 of misconduct with respect to Sony.

11 45. **Toshiba.** Like Sony, Toshiba was once a significant AMD customer, but also Like
12 Sony, Toshiba received a very substantial payment from Intel in 2001 not to use AMD processors.
13 Toshiba thereupon dropped AMD. Its executives agreed that Intel's financial inducements
14 amounted to "cocaine," but said they were hooked because reengaging with AMD would
15 jeopardize Intel market development funds estimated to be worth \$25-30 million per quarter.
16 Toshiba made clear to AMD that the tens of millions of dollars of additional marketing support was
17 provided on the explicit condition that Toshiba could not use AMD microprocessors. In
18 proceedings brought by the JFTC, Intel has accepted the JFTC charges of misconduct with respect
19 to Toshiba.

20 46. **NEC.** AMD also enjoyed early success with NEC, capturing nearly 40% of its
21 microprocessor purchases for notebooks and desktops in the first quarter of 2002. In May 2002,
22 Intel agreed to pay NEC more than 300 million yen per quarter in exchange for caps on NEC's
23 purchases from AMD. The caps assured Intel at least 90% of NEC's business in Japan, and they
24 established an overall worldwide quota on NEC's AMD dealings. The impact was immediate.
25 While AMD had maintained an 84% share of NEC's Japanese consumer desktop business in the
26 third quarter of 2002, after the payments, AMD's share quickly plummeted to virtually zero in the
27 first quarter of 2003. NEC has made clear to AMD that its Japanese share must stay in the single
28 digits pursuant to NEC's agreement with Intel. Worldwide, AMD's share dipped from nearly 40%

1 to around 15%, where it stands today. In proceedings brought by the JFTC, Intel has accepted the
2 JFTC charges of misconduct with respect to NEC.

3 47. **Fujitsu.** In the summer of 2002, Fujitsu informed AMD that Intel had pressured
4 Fujitsu to remove Fujitsu's AMD-powered desktop models from Fujitsu's website. Fujitsu
5 complied by making any potential AMD-buyer click past Intel products to get to the AMD
6 offerings. Then, in early 2003, Intel moved to lock up an even greater share of Fujitsu's business.
7 Intel offered an undisclosed package of financial incentives in return for Fujitsu's agreement to
8 restrict its dealings with AMD. Fujitsu's catalog currently limits AMD to a single notebook
9 product. In proceedings brought by the JFTC, Intel has accepted the JFTC charges of misconduct
10 with respect to Fujitsu.

11 48. **Hitachi.** According to the JFTC, Intel has also purchased an exclusive-dealing
12 arrangement with Hitachi, which had been a substantial AMD customer. The agreement caused
13 AMD's Hitachi business to fall precipitously. For example, during the first part of 2002, AMD
14 was shipping 50,000 Athlon microprocessors to Hitachi per quarter. But by the middle of the year,
15 AMD sold no microprocessors to Hitachi at all. In proceedings brought by the JFTC, Intel has
16 accepted the JFTC charges of misconduct with respect to Hitachi.

17 49. **Gateway/eMachines.** From 2001 to 2004, Gateway was exclusively Intel. In 2001
18 former Gateway CEO, Ted Waitt, explained to an AMD executive that Intel offered him large
19 sums not to deal with AMD, which he could not refuse: "I have to find a way back to profitability.
20 If by dropping you, I become profitable, that is what I will do." Shortly thereafter, Gateway
21 stopped purchasing from AMD and issued a press release announcing its Intel exclusivity. The
22 announcement came within weeks of similar public announcements of Intel exclusivity by both
23 IBM and Micron.

24 50. **Supermicro.** Intel's exclusive dealing also extends to small, specialty OEMs of
25 which Supermicro is a good example. Supermicro, the preeminent system assembler for servers
26 and other high-end computers, historically has followed the Dell strategy of never buying from
27 AMD. This arrangement foreclosed AMD from a large part of the approximately one fifth of the
28 server sector not controlled by the Tier One OEMs. Following two years of negotiation,

1 Supermicro finally agreed last year to begin developing an Opteron-powered server; however, it so
2 feared Intel retaliation that it secretly moved the AMD development to quarters behind
3 Supermicro's main manufacturing facility. Further, it forbade AMD from publicizing the product
4 or beginning any marketing prior to its actual release. When, in April 2005, Supermicro finally
5 broke away from years of Intel exclusivity, it restricted distribution of its newly-released Opteron-
6 powered product to only sixty of its customers and promoted them with a glossy, upscale brochure
7 devoid of its name and labeled "secret and confidential".

8 **b. Product-Line, Channel or Geographic Restrictions**

9 51. Intel has also bought more limited exclusivity from OEMs in order to exclude AMD
10 from the most profitable lines or from channels of distribution best tailored to take advantage of
11 AMD's price/performance advantage over Intel. In exchange for discriminatory discounts,
12 subsidies or payments, for example, Intel has largely foreclosed AMD from the lucrative
13 commercial desktop sector. Intel has focused on the major OEMs because, when IT executives
14 from Fortune 1000 companies purchase desktop computers, they look for a strong brand on the box
15 – Dell, IBM or HP. Knowing this, Intel has relentlessly fought to block the introduction of an
16 AMD-powered commercial desktop by the major OEMs who have not ceded total exclusivity to
17 Intel. What follows, again, are only representative examples of Intel misconduct.

18 52. **HP.** In 2002, when AMD set out to earn a place in HP's commercial desktop
19 product roadmap, HP demanded a \$25 million quarterly fund to compensate it for Intel's expected
20 retaliation. Eager to break into the commercial market, and to earn a place in HP's successful
21 "Evo" product line, AMD agreed instead to provide HP with the first million microprocessors for
22 free in an effort to overcome Intel's financial hold over HP. On the eve of the launch, HP
23 disclosed its plan to Intel, which told HP it considered AMD's entry into HP's commercial line a
24 "Richter 10" event. It immediately pressured HP into (1) withdrawing the AMD offering from its
25 premier "Evo" brand and (2) withholding the AMD-powered computer from HP's network of
26 independent value-added resellers, the HP's principal point of access to small business users for
27 whom the computer was designed in the first place. Intel went so far as to pressure HP's senior
28 management to consider firing the HP executive who spearheaded the AMD commercial desktop

1 proposal. As a result of Intel's coercion, the HP-AMD desktop offering was dead on arrival. HP
2 ended up taking only 160,000 of the million microprocessors AMD offered for free. As of today,
3 HP's AMD-equipped commercial desktops remain channel-restricted, and AMD's share of this
4 business remains insignificant.

5 53. Intel also purchased HP's exclusivity for its most popular notebook line. HP
6 captured 15% of the U.S. retail market last Christmas with an Intel-powered 14.1" display
7 notebook (the "DV 1000") with a popular power saving feature called Quick Play. When AMD
8 sought to convince HP to carry a similar AMD-powered notebook, HP declined. It explained that
9 Intel had paid between \$3 and \$4 million to lock up this product line for at least one year.

10 54. **Gateway.** After Gateway's 2004 merger with eMachines, AMD attempted to
11 revive the relationship it had enjoyed with Gateway until 2001, but experienced extremely limited
12 success. While Gateway built one AMD-powered desktop model at the request of Circuit City,
13 AMD remains locked out entirely of Gateway's direct internet sales, its commercial offerings and
14 its server line. According to Gateway executives, their Company has paid a high price for even its
15 limited AMD dealings. They claim that Intel has beaten them into "guacamole" in retaliation.

16 55. **IBM.** AMD and IBM began negotiations in August 2000 over a proposed
17 commercial PC business partnership. After seven months and with a deal nearing completion, Intel
18 approached IBM with an incentive-based program under which Intel would become IBM's
19 "preferred supplier" for processors in commercial products. "Preferred" meant exclusive. IBM
20 accepted Intel's proposal and terminated discussions with AMD. In return for that exclusivity,
21 according to IBM executive Ed Thum, Intel paid IBM "millions of dollars in market development
22 funds."

23 56. Intel also acted to thwart AMD efforts to partner with IBM on servers. Although
24 IBM joined AMD as a launch partner when it introduced its Opteron 64-bit server chip in April
25 2003 – signaling to the industry and IT professionals its confidence in the product – Intel soon
26 dissuaded IBM from aggressively marketing Opteron servers. After investing heavily in its design,
27 IBM consigned its one Opteron computer model to a single target market segment (High
28 Performance and Technical Computing). This was done, according to an industry report

1 (confirmed by an IBM executive), because Intel paid IBM to shelve any further Opteron
2 development. IBM also took Intel money in 2004 to scrap plans for a multiple-microprocessor
3 Opteron server it had already designed and previewed with customers.

4 57. Intel has also purchased IBM exclusivity in its “ThinkCentre” line of commercial
5 desktops. When AMD pressed IBM to add an Athlon 64 model to its “ThinkCentre” roadmap,
6 IBM executives explained that the move would cost them important Intel subsidies, and they
7 declined.

8 58. **Fujitsu.** In 2002, Fujitsu and AMD formed an alliance to develop a low-power
9 commercial notebook (FMV Lifebook MG Series) scheduled to go to market in the first quarter of
10 2003, which AMD spent over 20 million yen designing. Shortly before the launch, Fujitsu told
11 AMD that Intel would not allow it to launch an AMD-powered commercial notebook, and the
12 project died. To this day, AMD remains locked out of Fujitsu’s commercial notebook lines.
13 Intel’s exclusionary conduct with Fujitsu extends beyond commercial notebooks. In the consumer
14 space, for example, Intel purchased total exclusivity for Fujitsu’s FM-Biblo NB consumer
15 notebook line. When AMD tried to break Intel’s lock on Fujitsu notebooks by offering to match
16 any Intel discount, Fujitsu made clear that there was no price AMD could pay because Intel simply
17 would not allow it. To this day, AMD remains locked out of Fujitsu’s Biblo line.

18 59. **Fujitsu-Siemens.** Fujitsu-Siemens, a European joint-venture, was once a mainstay
19 for AMD’s desktop business, with AMD chips powering over 30% of Fujitsu-Siemens’ offerings in
20 the consumer sector. In early 2003, Intel offered Fujitsu-Siemens a “special discount” on Celeron
21 processors which Fujitsu-Siemens accepted in exchange for hiding its AMD computers on its
22 website and removing all references to commercial AMD-powered products in the company’s
23 retail catalog.

24 60. Intel has also succeeded in convincing Fujitsu-Siemens to impose market
25 restrictions on its AMD-powered PCs. Its parent, Fujitsu, currently sells an AMD-equipped
26 Lifebook S2010, a commercial notebook, but only in the U.S. and Japan. Fujitsu-Siemens has
27 declined AMD’s plea to offer the machine in the European market as well. Similarly, Fujitsu-
28 Siemens designed for the European market the FMC Lifebook MG Series notebook. But it refused

1 to offer that computer in Asia or North America. Finally, although Fujitsu-Siemens produces an
2 AMD commercial desktop, the Scenico, it refuses to advertise it on its website, offering it instead
3 only as a build-to-order product. Having invested significantly to bring these computers to market,
4 Fujitsu-Siemens has been able to offer no explanation for its refusal to exploit them worldwide.
5 AMD's unit share of Fujitsu-Siemens' business recently fell below 30% for the first time in four
6 years.

7 61. **NEC.** Intel was forced to relax its hold on NEC's business when long-time NEC
8 customer, Honda Motor Company, demanded that NEC supply it with servers powered by AMD's
9 Opteron microprocessors. After underwriting the considerable expense of designing and
10 manufacturing an Opteron server for Honda, NEC then inexplicably refused to market the product
11 to any of its other customers.

12 62. There is no reason, other than Intel's chokehold on the OEMs, for AMD's inability
13 to exploit its products in important sectors, particularly commercial desktops. These computers,
14 which large corporate customers buy in the tens of thousands at a time, represent a lucrative
15 opportunity for the supplier. Yet, the microprocessors that power them are identical to
16 microprocessors in consumer computers, a sector in which AMD has won both praise and market
17 share. The only material difference between the consumer and commercial segments is that many
18 more system builders supply desktops to consumers, making it more difficult for Intel to control
19 their microprocessor choice.

20 **c. Exclusionary Rebates**

21 63. Intel has also imposed on OEMs a system of first-dollar rebates that have the
22 practical and intended effect of creating exclusive or near-exclusive dealing arrangements and
23 artificially foreclosing AMD from competing for a meaningful share of the market. In general, the
24 rebate schemes operate as follows: quarterly, Intel unilaterally establishes for each of its customers
25 a target level of purchases of Intel microprocessors. If the customer achieves the target, it is
26 entitled to a rebate on all of the quarter's purchases of all microprocessors – back to the very first
27 one – generally in the neighborhood of 8-10% of the price paid. Intel provides the rebate in cash at
28 the quarter's close. OEMs operate on razor-thin margins, so qualifying for an Intel rebate

1 frequently means the difference between reporting a profit or a loss in the coming – and closely
2 watched – quarterly earnings.

3 64. In contrast to “volume discounts” that sellers offer on a graduated and
4 nondiscriminatory basis to reflect cost efficiencies that accrue when dealing in larger quantities,
5 Intel’s is a system of “penetration” or “loyalty” rebates designed to exclude AMD from a
6 substantial portion of the market. Intel intentionally sets a rebate trigger at a level of purchases it
7 knows to constitute a dominant percentage of a customer’s needs. It is able to develop
8 discriminatory, customer-by-customer unit or dollar targets that lock that percentage (without ever
9 referencing it) because industry publications accurately forecast and track anticipated sales and
10 because OEM market shares – which industry publications also report weekly, monthly and
11 quarterly – do not change significantly quarter to quarter.

12 65. Intel’s retroactive discounts can operate to price microprocessors so low that AMD
13 is put at a competitive disadvantage it cannot overcome. Consider an OEM which anticipates
14 purchasing 100 microprocessors that both Intel and AMD sell for \$100 each. Intel knows that
15 because of its prior model introductions, the customer will have to buy 60 from Intel. The
16 customer considers buying its expected balance for its new models from AMD, but Intel offers it a
17 rebate that will entitle it to a 10% retroactive discount if, but only if, it purchases 90 units or more.
18 If the customer buys 30 of the 40 additional units from Intel to qualify for the rebate, its
19 incremental cost for the 30 will be \$3,000 (30 units at \$100/unit) less the 10% rebate going back to
20 the first unit it purchased, which amounts to \$900 (90 units x \$10/unit), for a total of \$2,100.

21 66. AMD can only capture the 30 units if it offers a price that makes the customer
22 indifferent between getting the Intel rebate and getting an overall equivalent deal on AMD
23 microprocessors. Thus, for the 30 units that are up for grabs, AMD would have to lower its price
24 to \$70 per unit (because 30 units x \$70/unit equals the \$2,100 net cost for buying from Intel). In
25 effect, the rebate forces AMD to charge \$20 dollars less than the \$90 discounted Intel price if it
26 attempts to get any business from the customer at all. That is because it is selling the customer
27 only 30 units over which it has to spread a \$900 discount while Intel can spread it out over 90. At
28 the end of the day, this creates a serious competitive disadvantage for AMD. As shown in the

1 example, AMD is forced to discount its price three times as much as Intel just to match the Intel
2 discount – not because its processors are inferior – far from it – but because Intel has assured for
3 itself – by its past predatory practices – a significant base of assured demand which enables Intel to
4 inexpensively spread its first-dollar discount. Importantly, this new base of demand – driven by
5 the OEM’s purchasing – will enable Intel to repeat its exclusionary practice when the next line of
6 models is unveiled.

7 67. At least in the short run, most if not all of the major OEMs must engage
8 significantly with Intel (1) because AMD is too small to service all their needs while continuing to
9 satisfy other customer demand; (2) because to meet customer expectations, OEMs must assure
10 commercial computer buyers that specifications, including the microprocessor, will remain
11 unchanged during the product’s lifecycle; and (3) because Intel has encouraged end-users to
12 specify that processors be of the same family among similar computers in one installation, as this is
13 perceived to increase reliability (although technically this is not the case). Intel uses its retroactive
14 discounts to make its large, captive market share self-perpetuating. In any one quarter, AMD
15 cannot economically match Intel’s retroactive rebate because it competes for too small a share of
16 the customer’s volume over which to spread the dollars necessary to equal the customer’s total
17 Intel cost savings. As a result, it loses the business and thus goes into the next selling cycle with
18 Intel imbedded in additional customer product over which Intel can spread its rebates. This serves
19 again to artificially constrain AMD’s opportunity to match Intel’s ensuing round of retroactive
20 discounts. Intel’s intertemporal leveraging of its market share effectively forecloses AMD from
21 ever having a fair opportunity to compete.

22 68. Intel exacts a severe penalty from OEMs who fail to meet their targets. For
23 example, during the fourth quarter of 2004, AMD succeeded in getting on the HP retail roadmap
24 for mobile computers, and its products sold very well, helping AMD capture nearly 60% of HP’s
25 U.S. retail sales for the quarter. Intel responded by withholding HP’s fourth quarter rebate check
26 and refusing to waive HP’s failure to achieve its targeted rebate goal. Instead, Intel “allowed” HP
27 to make up the shortfall in succeeding quarters when HP promised Intel at least 90% of HP’s
28 mainstream retail business.

69. Intel has deployed a variety of variants of this basic rebate scheme. In the case of one European OEM, for example, Intel imposes the additional condition that the customer purchase target volumes of specific processors, generally microprocessors against which AMD's products compete particularly well. In the case of another, Intel offers as an inducement discounted microprocessors rather than rebates. In the case of the European division of one U.S. OEM, Intel has imposed a target of between 70-90% of the customer's requirements. Rather than qualifying the customer for a cash rebate, however, meeting the target entitles the OEM to purchase designated processors at up to 20% below "normal" cost, thereby enabling the customer to obtain favorable pricing on bundled products (*e.g.*, a Centrino-series processor and chipset) and/or to receive product offerings not available to competitors.

70. Intel makes similar offers to smaller OEMs but they are generally unwritten, and Intel leaves undefined the consequences of failing to meet a target. Thus, a customer falls short at its peril, knowing only that it may lose its account with Intel and have to source future products from Intel distributors, which is both more expensive and provides less security of supply than direct purchase.

71. The salient features of all of Intel's rebate schemes are that they are discriminatory and market-foreclosing. If the customer chooses to purchase any significant quantity of microprocessors from AMD, it will not qualify for its rebate, and its price will be higher on all the Intel processors it buys across the board. By tailoring targets to each customer's size and anticipated volume, Intel locks up significant percentages of the market much more effectively and at a lesser cost to itself – but to a greater harm to AMD and ultimately consumers – as compared to offering such rebates for comparable purchase levels to all customers on a nondiscriminatory basis.

72. Intel's use of retroactive rebates leads, in some cases, to below-cost pricing on incremental sales. The following example shows why a customer's incremental cost of purchasing from Intel those units that both Intel and AMD could supply (the "contested sales") can be zero or even negative – a price AMD cannot match. Consider an OEM which has purchased 90 units of Microprocessor A at \$100 per unit under an Intel rebate scheme that entitles it to a 10% first-dollar discount but only after it purchases more than 90 units. Its cost for the 90 processors is \$9,000.

1 The OEM is now considering an additional purchase of a further 10 units. If it makes the
2 additional purchase from Intel, the OEM will meet the expenditure condition and will qualify for
3 the 10% per unit discount on all units. Accordingly, the total spent will remain \$9,000. The
4 incremental cost of the 10 additional microprocessors – as well as Intel’s incremental revenue –
5 will be zero (the \$1,000 additionally spent, less the \$1,000 thereby saved). In other words, this
6 scheme leads to incremental units being offered to the OEMs for nothing, leaving AMD hopelessly
7 boxed out.

8 73. Importantly, even if Intel were to earn some incremental revenue on these marginal
9 units, these additional revenues could be below the incremental cost of their production. As a
10 result, Intel’s additional profit on the sale would be negative, but for the fact that it had a long-run
11 exclusionary effect on AMD. (Obviously, if Intel earns no revenues on its additional sales, it has to
12 be foregoing profits.) As this analysis shows, some of Intel’s discriminatory, retroactive rebates
13 amount to unlawful, predatory below-cost pricing.

14 74. Even where Intel’s prices are above cost on the incremental volumes and overall
15 despite its retroactive rebate schemes, these rebates enable Intel to lower prices selectively in the
16 contested market segment while maintaining higher prices in its captive market. For example, Intel
17 can offer rebates which are granted across the entire volume of sales but which are triggered only if
18 the OEM increases its purchases beyond the portion of its requirements which is captive to Intel.
19 Indeed, Intel can even price above the “monopoly” level for the volumes below the benchmark and
20 offer huge discounts for additional purchases knowing full well that the OEM will not buy less than
21 the benchmark and, instead, source the overwhelming share of its purchases from Intel thereby
22 “qualifying” for the putative rebate while at the same time denying AMD any reasonable volume
23 opportunity.

24 75. The use of retroactive rebates to limit AMD to a small share of an OEM’s business
25 heightens the obstacle to inducing the OEM to launch AMD-powered platforms. OEMs incur
26 substantial expense in designing and engineering a new computer, and make the investment only if
27 they foresee a substantial chance of selling a sufficient volume to recoup it. Intel’s rebate and other
28

1 business strategies effectively cap the volumes of AMD-powered products that an OEM can sell.
2 Hence, Intel's practices exacerbate normal impediments to entry and expansion.

3 **d. Threats of Retaliation**

4 76. Beyond exclusive dealing, product and channel restrictions and exclusionary
5 rebates, Intel has resorted to old-fashioned threats, intimidation and "knee-capping" to deter OEMs
6 from dealing with AMD. Intel has a variety of pressure points at its disposal: it can unilaterally
7 reduce or withdraw a discount, rebate or subsidy; it can impose a discriminatory price increase on a
8 disfavored customer, extend a price cut to that customer's competitor, or force retailers into
9 dropping the customer's computers and buying from its competitor instead; or it can delay or
10 dispute an allowance or rebate – all of which can turn a profitable quarter for an OEM into an
11 unprofitable one. Other pressure points on accounts it deems disloyal include threatening to delay
12 or curtail supplies of scarce processors or essential technical information. Examples abound.

13 77. As Gateway executives have recounted, Intel's threats beat them into "guacamole."
14 But Gateway is not alone. Prior to its merger with HP, Compaq Computer received Intel threats
15 every time it engaged with AMD. In late 2000, for example, Compaq's CEO, Michael Capellas,
16 disclosed that because of the volume of business he had given to AMD, Intel withheld delivery of
17 server chips that Compaq desperately needed. Reporting that "he had a gun to his head," Capellas
18 informed an AMD executive that he had to stop buying AMD processors.

19 78. In 2002, Intel pointed its gun at NEC. Intel threatened to discontinue providing
20 NEC with the technological roadmap of future Intel products if NEC did not convert its entire line
21 of Value Star L computers to Intel microprocessors. Without that roadmap, NEC would be at a
22 distinct competitive disadvantage. Predictably, NEC succumbed and eliminated AMD from the
23 Value Star L series in 2002 and 2003.

24 79. NEC's European subsidiary, NEC-CI, which operates NEC's European and non-
25 Japanese Asian divisions, reported that Intel executives said they would "destroy" NEC-CI for
26 engaging with AMD in the commercial desktop segment. Intel told NEC-CI's retailers that NEC-
27 CI's AMD dealings could impair its ability to supply products to its customers, and when NEC-CI
28 resisted the pressure, Intel imposed a discriminatory price increase.

1 80. AMD had been engaged in discussions with IBM about introducing an Opteron
2 “blade” server, when IBM suddenly announced that any such product it distributed could not bear
3 an IBM logo. When pressed for an explanation, IBM reported that it could not appear overly
4 supportive of AMD server products because it feared Intel retaliation.

5 **e. Interference with AMD Product Launches**

6 81. Key to gaining quick market acceptance of a new microprocessor is a chipmaker’s
7 ability to develop a lineup of reputable launch partners, consisting of OEMs prepared to roll out
8 products featuring the chip, major customers who are willing to buy and embrace it, and other
9 industry allies, such as major software vendors and infrastructure partners who can attest to its
10 quality and reliability. Particularly for commercial and enterprise (*i.e.*, server-work station)
11 purchasers, a successful and impressive “launch” is essential to generating confidence among the
12 computer professionals who will be the potential audience for the new microprocessor.

13 82. Aware of the importance of product launches, Intel has done its utmost to
14 undermine AMD’s. Set forth below are several examples.

15 83. AMD’s September 23, 2003, launch of Athlon64 was a watershed event for the
16 Company. Upon learning the launch schedule, Intel did its best to disrupt it. For example, Acer
17 committed to support the AMD rollout by making a senior executive available for a videotaped
18 endorsement and by timing the introduction of two computers, a desktop and a notebook, to
19 coincide with AMD events planned for Cannes, San Francisco and Taiwan. Days before the event,
20 Intel CEO, Craig Barrett, visited Acer’s Chairman, CEO and President in Taiwan, expressed to
21 them Intel’s “concern” and said Acer would suffer “severe consequences” if it publicly supported
22 AMD’s launch. The Barrett visit coincided with an unexplained delay by Intel providing \$15-20
23 million in market development funds owed to Acer. As a result, Acer withdrew from the launch in
24 the U.S. and Taiwan, pulled its promotional materials, banned AMD’s use of the video, and
25 delayed the announcement of its Athlon64-powered computers. Acer’s President subsequently
26 reported that the only thing different about Intel’s threats was the messenger – they were “usually
27 done by lower ranking managers,” not Intel’s CEO.

1 84. HP also withdrew precipitously from the Athlon64 launch after committing to
2 participate. HP had agreed to support the launch by producing a promotional video and by sending
3 senior executives to all three launch sites. Just before launch, however, HP manager, John
4 Romano, pulled the video and announced that HP would only be sending a junior manager, and
5 then only to Europe.

6 85. Other AMD customers and channel partners reporting Intel coercion to withdraw
7 from the Athlon64 launch were Lenovo, NEC-CI and Best Buy.

8 86. Intel also disrupted AMD's launch of its Opteron server chip, which was rolled out
9 on April 22, 2003, with few in attendance and little industry support. A computer industry journal
10 reported Intel's fingerprints: "They all [vendors] told me that prior to the launch, they received a
11 phone call from Intel. Intel asked if they were going to the launch. If they replied yes, the Intel rep
12 asked them if it was 'important to them to go,' or 'if they really wanted to go.' Pressing the
13 vendors, I got the same response, 'Intel is too smart to threaten us directly, but it was quite clear
14 from that phone call that we would be risking our various kickback money if we went.'"

15 87. Other companies that reported being intimidated from participating in the Opteron
16 launch were MSI, Atipa, Solectron and Fujitsu-Siemens. Indeed, Intel representatives told Fujitsu-
17 Siemens' executives in the weeks preceding the Opteron launch that if they attended, they would
18 be the only Tier One OEM showing its support as all of the others would back out. With the
19 exception of IBM, Intel was right.

20 88. These are not isolated examples, but rather illustrations of Intel's relentless
21 campaign to undermine marketing efforts by its one remaining competitor. For example, IBM
22 pulled its AMD-powered computers from the 2004 Palisades eServer and PC Show, citing a
23 contractual agreement with Intel said to prohibit it from endorsing those competitive products.
24 And at the 2004 Super Computing Show, an annual conference devoted to high performance
25 computing, Intel offered two other AMD customers money to remove AMD systems from their
26 booths. At CeBit, Intel threatened to pull a half million dollars of support from Fujitsu-Siemens for
27 displaying AMD products (which were removed).

1 **f. Product Bundling**

2 89. Intel also uses product bundling as an exclusionary weapon in a variety of ways.
3 Intel's most common deployment is in bidding for a new OEM platform: it bundles
4 microprocessors with free (or heavily discounted) chipsets or motherboards, often offered in
5 amounts exceeding the OEM's requirements for the new platform. (The excess, of course, is only
6 compatible with Intel processors, thereby providing the OEM a strong inducement to go with Intel
7 rather than AMD on uncommitted models.) AMD does not sell chipsets or motherboards; they are
8 provided by independent suppliers such as ATI, nVidia and Via which incur their own costs and
9 control their own pricing. Hence, to match Intel's bundled microprocessor-chipsets-motherboards
10 offer, AMD must extend a discount on its microprocessors that will not only match any Intel
11 discount on the microprocessors themselves but also will compensate the OEM for the savings it
12 will lose on independent Intel chipset and motherboard purchases. The additional compensation
13 AMD is forced to provide through a discount on the sale of microprocessors alone makes AMD's
14 sale of microprocessors potentially unremunerative, and it also enables Intel to avoid competing
15 with AMD directly on microprocessor price and quality by imposing disproportionate burdens on
16 AMD that are wholly unrelated to AMD's product quality which, as has been demonstrated, is
17 frequently superior to that of Intel's.

18 90. As retaliation for dealing with AMD, Intel has also used chipset pricing as a
19 bludgeon. For example, in 2003, Acer had committed to launch the AMD Athlon XP. Acer
20 executives worldwide had been working with AMD to bring the product to market post-launch.
21 But, on the eve of the launch the Acer management in Taiwan pulled the plug. AMD learned from
22 Acer executives that Intel had threatened to raise chipset prices by \$10 on all Intel-based Acer
23 systems if *any* processor business was awarded to AMD outside of Europe.

24 91. Intel's dealings with OEMs are unlawfully exclusionary, have no pro-competitive
25 justification, and are intended to maintain its monopoly.

26 **2. Practices Directed At Distributors**

27 92. Intel uses many of the same tactics it practices on OEMs to restrict distributors from
28 carrying AMD processors or selling AMD products into markets it deems strategic. For example,

1 it entered into an exclusive deal with Synnex, which is one of the largest U.S. distributors. Given
2 Intel's 80% plus market share, there is no pro-competitive justification for this arrangement.

3 93. As with OEMs, Intel offers discounts and rebates to distributors on the condition
4 that they not do business with AMD, either worldwide or in strategic sub-markets. For example, in
5 December 2004, Ingram Micro, Intel's biggest distributor in China, suddenly cut off discussions to
6 distribute AMD chips as well. A high-ranking Ingram Micro official later reported to AMD that
7 Ingram Micro had no choice because Intel proffered loyalty rebates that were too lucrative to pass
8 up.

9 94. Intel also offers a panoply of special programs for distributors who carry Intel
10 microprocessors exclusively: marketing bonuses, increased rebates, credit programs for new
11 customers (credits that can be used for all products from Intel and any other suppliers), payment for
12 normal freight charges, and special inventory assistance such as credits to offset inventory costs.
13 When such more nuanced means of achieving exclusivity fail, Intel has simply bribed distributors
14 not to do business with AMD. For example, a high-ranking Tech Data executive turned down \$1
15 million to stop doing business with AMD, which caused the Intel representatives to ask, "How
16 much would it take?"

17 95. Intel also offers retroactive rebates triggered when a distributor reaches a prescribed
18 buying quota. Like the rebates offered to OEMs, the intent is to inflict economic punishment on
19 those who do too much AMD business. But, unlike OEMs, distributors remain ignorant of the
20 goals Intel has set for them or the precise consequences of failing to meet them. Intel does not
21 share this information with them; they simply receive a check at the end of a quarter. As a result,
22 every AMD chip they purchase, they buy at their peril.

23 96. Finally, those distributors who choose to do business with AMD have been
24 conditioned to expect Intel retaliation. For example, when ASI, one of the largest computer
25 hardware and software distributors, began distributing AMD processors, Intel demanded that it
26 exclude AMD personnel from its ASI Technology Shows and its General Managers' meetings.
27 Until recently, ASI refused master distributor status from AMD, despite the financial benefits
28 attached, because it feared that such a public alignment with AMD would trigger Intel retaliation.

1 When, in January 2005, it finally accepted Master Distributor status, Intel began reducing the level
2 of market development funds ASI received.

3 97. Avnet Inc., one of the world's largest computer equipment distributors and an avid
4 AMD supporter, has also received its share of Intel intimidation. Thus, Avnet cited Intel as the
5 reason it could not distribute AMD parts to the industrial sector. And when AMD launched its
6 Opteron server chip, Intel made clear it would make it "painful" for Avnet were it to begin
7 distributing that chip. When Avnet did so anyway, Intel threatened to cut it off. Another
8 distributor got even worse treatment. In retaliation for Supercom's AMD dealings in Canada, Intel
9 pressured Supercom's customers to switch to another distributor.

10 98. These are not the only distributors that Intel has attempted to coerce from doing
11 business with AMD. Others include R.I.C. in Germany, Paradigit in the Netherlands, and Quote
12 Components, also in the Netherlands.

13 99. Intel's dealings with distributors are unlawfully exclusionary, have no
14 procompetitive justification, and are intended to maintain its monopoly.

15 **3. Practices Directed At Retailers**

16 100. In both the U.S. and internationally, approximately one fifth of desktop and
17 notebook computers are purchased at retail stores. A handful of retailers dominate the U.S. PC
18 market: Best Buy and Circuit City are the largest. Other significant but smaller retailers are
19 Walmart/Sams Club, Staples, Office Depot and Office Max.

20 101. Most of the PCs sold at retail are sold during four or five "buying seasons" that
21 correspond to events on the calendar ("Dads and Grads," "Back to School," "Holiday," etc.), and
22 retailers refresh their inventory for each. A chipmaker faces a two-step process to get its platform
23 on retail shelves: first, it must convince one or more OEMs to build machines using its
24 microprocessor at a suggested price point (called "getting on the roadmap"); and second, it must
25 convince the retailer to stock and devote shelf space to these machines. Shelf space does not come
26 for free. The major retailers demand market development funds ("MDF") in exchange. MDF can
27 consist of cooperative advertising support, but more frequently it comprises a marketing-related
28 opportunity that a chipmaker must buy for tens of thousands of dollars, for example, space in a

1 Sunday circular, an in-store display or an internet training opportunity with the chain's sales staff.
2 The MDF required to secure shelf space can run as high as \$25 per box depending on the computer
3 price point and how urgently the competing chipmakers want the shelf space.

4 102. Intel has historically enjoyed an advantage over AMD at retail because, using many
5 of the strategies described above, it has had greater access to the OEMs' roadmaps and the ability
6 to exert pressure to keep AMD out of their product plans. Also, it has significantly greater
7 financial resources with which to buy retail shelf space.

8 103. But to leverage those advantages, Intel has also made exclusive deals with many key
9 retailers around the world. For example, until recently Office Depot declined to stock AMD-
10 powered notebooks regardless of the amount of MDF AMD offered, citing its "premier" status
11 with Intel that would be put at risk. Fry's is Fujitsu's only retailer in the United States. When Intel
12 learned that Fry's was very successfully marketing a Fujitsu's Athlon™ XP-based notebook, it
13 offered Fry's a large payment to remove it from its shelves.

14 104. The story is even worse in Europe. AMD has been entirely shut out from Media
15 Markt, Europe's largest computer retailer, which accounts for 35% of Germany's retail sales. Intel
16 provides Media Markt between \$15-20 million of MDF annually, and since 1997 Media Markt has
17 carried Intel computers exclusively. Intel subsidies also foreclose AMD from Aldi, a leading
18 German food retail chain, whose PC sales account for an additional 15-20% of the German market.

19 105. In the United Kingdom, Intel has locked up substantially all of the business of DSG
20 (Dixon Services Group), operator of three major chains including Dixon and PC World that
21 collectively account for two thirds of the U.K. PC market. In exchange for Intel payments, DSG
22 has agreed to keep AMD's share of its business below 10%. Like Media Markt, DSG reports that
23 Intel penalizes it with reduced MDF just on account of the small amount of business it does with
24 AMD. Toys 'R' Us in the U.K. is also exclusive to Intel. Time, another U.K. retailer (which builds
25 computers as well), took a substantial MDF payment from Intel in exchange for near-exclusivity on
26 notebooks during the first half of 2004, and it reports that Intel has withheld discounts because
27 Time has introduced too many AMD Athlon64 desktop models. In France, Intel has brought
28

1 pressure on the largest retailers, including Conforama, Boulanger, causing them to cease dealing
2 with AMD or drastically reduce their AMD business.

3 106. AMD has nonetheless made some progress in gaining retail market share. Because
4 of price/performance advantages, which are key in retail, OEMs build approximately 15% of their
5 U.S. domestic market desktops with AMD processors; within notebook roadmaps, AMD represents
6 approximately 10%. On a shelf-space to sales basis, AMD has generally outperformed Intel. For
7 instance, in the desktop segment during the fourth quarter of 2004, AMD-equipped computers
8 captured between a 33%-38% share of Circuit City's sales, despite being limited to five of the 25
9 models (20%) on the Circuit City shelves. And with approximately 15% of the shelf space allotted
10 to its products at Best Buy and CompUSA, AMD computers accounted for roughly 30% and 22%
11 of their sales, respectively. These numbers confirm that AMD's products perform well at retail,
12 provided that space is available.

13 107. In fact, Intel's sales staff was instructed "not to let this happen again." As a result,
14 Intel instituted a rebate program similar to what it foisted on OEMs, with similar exclusionary
15 effect. Under this program, Intel provides full MDF payments to retailers, such as Best Buy and
16 Circuit City, only if they agree to limit to 20% not just the shelf space devoted to AMD-based
17 products, but also the share of revenues they generate from selling AMD platforms. If AMD's
18 share exceeds 20%, the offending retailer's marketing support from Intel is cut by 33% *across all*
19 *products*.

20 108. This is how the program works at Circuit City. If less than 20% of Circuit City's
21 notebook revenue derives from AMD-based computers (30% for desktops), Intel has agreed to pay
22 Circuit City \$15 in MDF per Intel-powered machine; but if the AMD percentage reaches or
23 exceeds 20%, Circuit City's MDF subsidy is cut to \$10. This creates a \$5 per box "tax" on the
24 retailer for doing 20% or more of its dollar volume with AMD-powered machines; and this "tax" is
25 applicable to all of the Intel-powered machines that the retailer buys, back to the very first
26 machine.

27 109. The following illustrates the competitive disadvantage this creates for AMD: if
28 Circuit City were to purchase only Intel-powered notebooks for its 200,000-unit inventory in a

quarter, Intel would pay it \$15 of MDF per computer, or a total of \$3 million. However, if Circuit City were to reduce its purchases of Intel-based notebooks to 80% (160,000 units) so that it could stock a modest number of AMD-powered computers, Intel MDF would fall to \$1.6 million (\$10 MDF/unit times 160,000 units). Were AMD to match Intel's \$10 per unit MDF on the 40,000 units it supplied, Circuit City would receive an additional \$400,000, bringing its total MDF to \$2 million, leaving it \$1 million worse off for doing business with AMD. For AMD to make Circuit City "whole," it would have to vastly increase its MDF on its 20% share to \$35 MDF per unit (40,000 x \$35 = \$1.4M), which together with Intel's \$1.6 million would bring the total MDF back to \$3 million. In other words, to just capture a 20% share, AMD must offer two or three times as much MDF as Intel – because it has far fewer units over which to spread the difference. Given these perverse economies, Circuit City is not likely to allocate less than 80% of its notebook sales to Intel, even if it means taking AMD stock off the shelves at the end of a quarter. (Indeed, to avoid inadvertently running afoul of the limitation, a prudent distributor would keep AMD's share well short of 20%.)

110. Nor is Intel above threatening retailers to gain preferred treatment. For example, at the recent CeBit computer show in Hanover, Germany (the largest computer show in the world), a German chain, Vobis, hung an AMD Turion64 banner from its booth as part of a co-marketing agreement with AMD and its OEM partner (Yakamo) to announce AMD's new mobile microprocessor. Intel's German general manager and its vice president for mobile products demanded that the Turion64 banner be removed. When Vobis' CEO declined, the Intel representatives threatened immediately to stop microprocessor shipments to Vobis' supplier. The banner was removed before the CeBit show opened.

111. Intel's dealings with retailers are unlawfully exclusionary, have no procompetitive justification, and are intended to maintain its monopoly.

4. Intel's Standard Setting and Other Technical Abuses

a. Intel's Exclusion of AMD from Industry Standards

112. Companies within the computer industry often agree to design certain aspects of their products in accordance with industry standards to ensure broad compatibility. Indeed,

standards are not only ubiquitous in the computer industry, they are essential. But when a company is unfairly excluded from the standards-setting process or is denied timely access to the standard, competition can be restrained in a way that reverberates throughout the entire market. Intel has employed, and continues to employ, a variety of tactics that have the purpose and effect of excluding and/or hampering AMD's full and active participation in the development of important industry standards. It has also worked to deny AMD timely access to such standards. Its efforts have hampered AMD's ability to vigorously compete in the market.

113. By way of example, Intel and AMD each develop and manufacture memory controller technologies that allow their processors and related components to communicate with memory. Intel designs and manufactures an entirely separate chip for this purpose, known as the Graphics and Memory Controller Hub, but AMD embeds its memory controllers directly into its processors, thus dispensing with the need for an extra chip and speeding up communication. Both companies need to know and have access to memory standards well in advance of producing their processors and/or chipsets so that their memory controller designs will be compatible with the next generation of memory devices.

114. The Joint Electron Device Engineering Council ("JEDEC") is the industry organization responsible for the standards governing the most recent generations of computer memory chips. Even though JEDEC was already developing the standards for the next generation of memory chips, Intel convened a secret committee that it dubbed the Advanced microprocessors Technology ("ADT") Consortium to develop a competing memory standard.

115. The ADT Consortium was cleverly structured with multiple tiers of membership, each with different levels of access to information. The majority of companies were consigned to the lowest tier, meaning that they would receive access to the memory standard only upon its completion, but not during its development. The actual development effort was undertaken by companies with the highest tier membership status, which Intel reserved for itself and the major memory manufacturers. No other companies were allowed input or full access to the standard during its development by the ADT Consortium.

1 116. AMD desperately needed access to the developing standard, and input into its
2 definition, in order to be able to launch a microprocessor with updated memory controller
3 technology at the same time as Intel. AMD lobbied repeatedly for higher tier membership status,
4 but was continually turned down. Intel had structured the ADT Consortium's rules to require a
5 unanimous vote – a rule that gave Intel veto power – over any decision to allow AMD to join the
6 development committee; and it used that veto power to cause the Consortium arbitrarily to reject
7 AMD's application.

8 117. By foreclosing AMD from input or access to the memory standard during its
9 development process, Intel deliberately placed AMD at a severe competitive disadvantage. As a
10 consequence of its exclusion, AMD had no opportunity to monitor participants' suggestions and to
11 object to Intel-proposed features that were without substantial benefit to consumers and were
12 instead motivated by Intel's desire to disadvantage AMD's microprocessor architecture.
13 Furthermore, by keeping the ADT Consortium memory standard-setting process shrouded in
14 secrecy, Intel was able to gain a significant head start. While the ADT Consortium was ultimately
15 unsuccessful in implementing an industry standard, this type of exclusionary conduct exemplifies
16 Intel's attempts to use industry standard-setting to competitively disadvantage AMD in an
17 unlawfully exclusionary manner.

18 118. Indeed, Intel is attempting a repeat performance with respect to a new memory
19 standard, this time excluding AMD by avoiding the open standard-setting committee entirely. Intel
20 is currently coercing the major memory producers into signing non-disclosure agreements and
21 working exclusively with Intel in a "secret" committee to develop the next generation memory
22 interface standard. Once under this agreement, the memory manufacturers are prohibited from
23 sharing information about their own product designs implementing the memory interface standard.
24 This has the effect of preventing AMD from completing the design of its processor memory
25 controllers until Intel permits memory manufacturers to communicate their interface specifications
26 to the industry.

1 119. By this scheme, Intel tightens its control over the industry by converting what the
2 component manufacturers intend as a public standard into a proprietary one, and thereby
3 guarantees itself an undeserved head-start and unfair competitive advantage.

4 **b. Intel's Promotion of Industry Standards that Disadvantage AMD**

5 120. Even where it has been unable to exclude AMD from participating in the
6 development of industry standards, Intel has attempted to drive the adoption of standards having no
7 substantial consumer benefit and whose sole or dominant purpose was to competitively
8 disadvantage AMD based on its highly integrated microprocessor architecture.

9 121. As an example, in 2004, JEDEC began developing standards governing the design
10 of the memory modules for next generation ("DDR3") memory devices. These modules, known as
11 dual inline memory modules, or "DIMMs," consisted of printed circuit boards upon which a
12 number of memory chips were mounted. The DIMMs connected the memory chips to the
13 computer's motherboard through a series of metal connectors known as "pins." One purpose of the
14 JEDEC standards was to define the functions of these pins so as to enable chipmakers to design
15 compatible memory controllers that would allow their microprocessors and the memory on the
16 DIMMs to communicate.

17 122. The JEDEC committee, which consists of members representing companies
18 throughout the computer industry, had already adopted a scheme for defining the pins for the
19 previous generation ("DDR2") DIMMs used in desktop and laptop computers. When the JEDEC
20 committee began work on standards for DDR3 memory modules for desktop computers, Intel
21 proposed that the committee adopt a pin definition similar to that used for the DDR2 memory
22 modules. This proposal made perfect sense, as Intel explained to the committee, because it allowed
23 DDR3 memory controllers to be compatible with DDR2 and DDR3 memory modules.

24 123. However, when the JEDEC committee began to define the pins for DDR3 laptop
25 memory modules in this consistent manner, Intel completely reversed its position,
26 counterproposing instead that the committee rearrange the pin definitions. Intel's proposal had no
27 discernable technical merit or basis.

1 124. In fact, Intel's motivation for proposing modification of the laptop memory module
2 pin definition was to competitively disadvantage AMD. Any modification to the laptop memory
3 module pin definition would require Intel and AMD to make corresponding modifications of their
4 memory controllers. AMD's microprocessor design, while representing a huge breakthrough in
5 integration, embeds the memory controller directly into its microprocessor. While this produces
6 significant computing advantages, modification of an embedded memory controller requires
7 significantly more time and expense.

8 125. Knowing this vulnerability, Intel proposed its modified DDR3 memory module pin
9 definition for laptop computers for the purpose of delaying AMD's introduction of a
10 technologically superior part. While Intel's proposal was ultimately rejected by the JEDEC
11 committee, confirming the proposal's complete lack of technical merit, this is yet another example
12 of how Intel has attempted to drive industry standards to achieve its exclusionary ends.

13 **c. Intel's Leveraging of Its Other Product Lines to Unfairly Disadvantage**

14 **(1) AMD in the Marketplace**

15 126. Intel has also designed and marketed microprocessor-related products with the goal
16 of compromising performance for those who opt for AMD solutions, even if it requires sacrificing
17 its own product quality and integrity.

18 127. An example is Intel's compilers. Generally, independent software vendors ("ISVs")
19 write software programs in high-level languages, such as C, C++, or Fortran. Before these
20 programs can be understood by a computer system, they must be translated into object code – a
21 machine-readable language – by a software program called a compiler. Different companies write
22 compilers for different operating systems (Windows, Linux, etc.) and for different programming
23 languages (C, C++, Fortran, etc.). Intel offers compilers for use with a variety of different
24 operating systems and programming languages.

25 128. Intel's compilers are designed to perform specialized types of optimizations that are
26 particularly advantageous for ISVs developing software programs that rely heavily upon floating
27 point or vectorized mathematical calculations. Such programs include, for example, mathematical
28 modeling, multimedia, and video game applications.

1 129. Intel has designed its compiler purposely to degrade performance when a program is
2 run on an AMD platform. To achieve this, Intel designed the compiler to compile code along
3 several alternate code paths. Some paths are executed when the program runs on an Intel platform
4 and others are executed when the program is operated on a computer with an AMD
5 microprocessor. (The choice of code path is determined when the program is started, using a
6 feature known as “CPUID” which identifies the computer’s microprocessor.) By design, the code
7 paths were not created equally. If the program detects a “Genuine Intel” microprocessor, it
8 executes a fully optimized code path and operates with the maximum efficiency. However, if the
9 program detects an “Authentic AMD” microprocessor, it executes a different code path that will
10 degrade the program’s performance or cause it to crash.

11 130. ISVs are forced to choose between Intel’s compilers, which degrade the
12 performance of their software when operated with AMD microprocessors, or third-party compilers,
13 which do not contain Intel’s particular optimizations. Sadly for AMD and its customers, for
14 legitimate reasons Intel’s compilers appeal to certain groups of ISVs, especially those developing
15 software programs that rely heavily on floating point and vectorized math calculations.
16 Unbeknownst to them, performance of their programs is degraded when run on an AMD
17 microprocessor not because of design deficiencies on the part of AMD, but deviousness on the part
18 of Intel.

19 **VIII. EFFECTS OF INTEL’S MISCONDUCT**

20 131. Intel’s unlawful conduct has caused and will continue to cause substantial harm to
21 competition in the market for x86 microprocessors in domestic, import, and export trade. Were it
22 not for Intel’s acts, AMD and others would be able to compete for microprocessor business on
23 competitive merit, both domestically and internationally, bringing customers and end-product
24 consumers lower prices, enhanced innovation, and greater freedom of choice.

25 132. Intel’s anticompetitive acts both inside and outside the territorial boundaries of the
26 United States have a direct, substantial, and reasonably foreseeable effect on trade and commerce
27 that is not trade and commerce with foreign nations, and on United States import trade and
28 commerce. In maintaining its monopoly by unlawfully denying rivals a competitive opportunity to

1 achieve minimum levels of efficient scale, Intel must necessarily exclude them from the product
2 market world wide. As the domestic U.S. market is but an integral part of the world market,
3 successful monopolization of the U.S. market is dependent on world market exclusion, lest foreign
4 sales vitalize a rival's U.S. competitive potential.

5 133. Intel's Sherman Act violative conduct throughout the world has caused and will
6 continue to cause substantial harm to the business of AMD in the domestic, import, and export
7 trades, in the form of artificially constrained market share, lost profits and increased costs of
8 capital. Additionally, that same conduct has had, and will continue to have, a direct, substantial,
9 and reasonably foreseeable effect on AMD's ability to sell its goods to foreign customers in
10 restraint of its U.S.-based and directed business, including its U.S. export business. These harms
11 are evidenced by the following:

12 • When AMD first entered the server market in 2002 with its Athlon microprocessor – a
13 part designed for desktops, not servers – the small OEMs and white-box vendors deploying the
14 chip nonetheless managed to secure approximately 3% of the worldwide server market. AMD
15 introduced its next generation Opteron microprocessor for servers the following year, and the chip
16 won rave reviews and passionate customer testimonials, including Best of Show at the June 2003
17 ClusterWorld Conference and Expo and Best Processor award in July 2003 from InfoWorld.
18 Nonetheless, by means of its exclusionary and anticompetitive conduct, as of the Fourth Quarter
19 2004, Intel had limited AMD's worldwide server market share to less than 5%, not appreciably
20 more than before it introduced the Opteron.

21 • Intel's exclusionary conduct has successfully boxed AMD out of the notebook sector. Its
22 exclusive deals with Dell, Sony and Toshiba alone bar AMD from a third of the world market and
23 half of U.S. domestic sales. Intel's economic coercion and fidelity rebates have foreclosed AMD
24 from an appreciable share of the remainder.

25 • AMD's Athlon64 is widely recognized as fully competitive with Intel's best desktop
26 offering with the added benefit that it can run 64-bit software. Nonetheless, with the exception of a
27 channel-restricted HP machine and a single Fujitsu-Siemens' model, AMD has failed to get a
28 single major OEM – which collectively dominate the lucrative commercial desktop sector – to

1 launch broadly an Athlon64 commercial desktop. Fortune 500 companies won't take a chance on
 2 AMD unless it partners with a Tier One desktop OEM, but Intel's exclusionary conduct, including
 3 its economic coercion of Dell, HP, IBM, Gateway and Acer, prevents that from happening. As a
 4 result, AMD's commercial desktop share is no greater now than it was in 2002.

5 **IX. CLAIMS FOR RELIEF**

6 **First Claim for Relief**

7 **(Violation of Section 1 of the Sherman Act)**

8 134. Plaintiff incorporates and realleges, as though fully set forth herein, each and
 9 every allegation set forth in the preceding paragraphs of this complaint.

10 135. Beginning at a time presently unknown to Plaintiff, but at least as early as June 28,
 11 2001, and continuing thereafter at least up to and including the present, the exact dates being
 12 unknown to Plaintiff, Defendant and various co-conspirators entered into a continuing agreement,
 13 understanding, and conspiracy in restraint of trade to artificially raise, fix, maintain, and/or
 14 stabilize prices for microprocessors in the United States in violation of Section 1 of the Sherman
 15 Act, 15 U.S.C. § 1.

16 136. In formulating and carrying out the alleged agreement, understanding, and
 17 conspiracy, the Defendant and its co-conspirators did those things that they combined and
 18 conspired to do, including but not limited to the acts, practices and course of conduct set forth
 19 above, and the following, among others:

- 20 a. To fix, raise, maintain and stabilize the price of microprocessors;
- 21 b. To allocate markets for microprocessors among themselves;
- 22 c. To submit rigged bids for the award and performance of certain
- 23 microprocessors contracts; and
- 24 d. To allocate among themselves the production of microprocessors.

25 137. The combination and conspiracy alleged herein has had the following effects,
 26 among others:

- 27 a. Price competition in the sale of microprocessors has been restrained,
- 28 suppressed, and/or eliminated in the United States;

- b. Prices for microprocessors sold by Defendant and its co-conspirators have been fixed, raised, maintained and stabilized at artificially high, non-competitive levels throughout the United States; and
- c. Those who purchased microprocessors directly or indirectly from Defendant and its co-conspirators have been deprived of the benefits of free and open competition.

138. Plaintiff has been injured and will continue to be injured in his business and property by paying more for microprocessors purchased indirectly from the Defendant and various co-conspirators than they would have paid and will pay in the absence of the combination and conspiracy, including paying more for personal computers and other products in which microprocessors are a component as a result of higher prices paid for microprocessors by the manufacturers of those products.

139. Plaintiff and the Class are entitled to injunction against Defendant, preventing and restraining the violations alleged herein.

Second Claim for Relief

(Violations of the California Cartwright Act)

140. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

141. Defendant's contract, combination, trust or conspiracy was centered in, carried out, effectuated and perfected mainly within the State of California, and Defendant's conduct within California injured all members of the Class throughout the United States. Therefore, this claim for relief under California law is brought on behalf of all members of the Class, whether or not they are California residents.

142. Beginning at a time presently unknown to Plaintiff, but at least as early for years from the filing of this complaint, and continuing thereafter up to today, Defendant and its co-conspirators entered into and engaged in a continuing unlawful trust in restraint of the trade and commerce described above in violation of Section 16720, California Business and Professional

1 Code. Defendant, and each of them, have acted in violation of Section 16720 to fix, raise, stabilize
2 and maintain prices of, and allocate markets for, microprocessors at supra-competitive levels.

3 143. The aforesaid violations of Section 16720, California Business and Professions
4 Code, consisted, without limitation, of a continuing unlawful trust and concert of action among the
5 Defendant and its co-conspirators, the substantial terms of which were to fix, raise, maintain and
6 stabilize the prices of, and to allocate markets for, microprocessors.

7 144. For the purpose of forming and effectuating the unlawful trust, the Defendant and its
8 co-conspirators have done those things which they combined and conspired to do, including but in
9 no way limited to the acts, practices and course of conduct set forth above and the following:

- 10 a. to fix, raise, maintain and stabilize the price of microprocessors;
11 b. to allocate markets for microprocessors amongst themselves;
12 c. to submit rigged bids for the award and performance of certain
13 microprocessors contracts; and
14 d. to allocate amongst themselves the production of microprocessors.

15 145. The combination and conspiracy alleged herein has had, *inter alia*, the following
16 effects:

- 17 a. price competition in the sale of microprocessors has been restrained,
18 suppressed and/or eliminated in the State of California and throughout the United States;
19 b. prices for microprocessors sold by Defendant and its co-conspirators have
20 been fixed, raised, maintained and stabilized at artificially high, non-competitive levels in the
21 States of California and throughout the United States; and
22 c. those who purchased microprocessors from Defendant and its co-
23 conspirators have been deprived of the benefit of free and open competition.

24 146. Plaintiff and the other members of the Class paid supra-competitive, artificially
25 inflated prices for microprocessors.

26 147. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff and the
27 members of the Class have been injured in their business and property in that they paid more for
28 microprocessors than they otherwise would have paid in the absence of Defendant's unlawful

1 conduct. As a result of Defendant's violation of Section 16720 of the California Business and
2 Professions Code, Plaintiff seeks treble damages and the costs of suit, including reasonable
3 attorneys' fees, pursuant to Section 16750(a) of the California Business and Professions Code.

4 **Third Claim for Relief**

5 **(Violations of the California Unfair Competition Law)**

6 148. Plaintiff incorporates and realleges, as though fully set forth herein, each and every
7 allegation set forth in the preceding paragraphs of this Complaint.

8 149. Defendant's business acts and practices were centered in, carried out, effectuated
9 and perfected mainly within the State of California, and Defendant's conduct within California
10 injured all members of the Class throughout the United States. Therefore, this claim for relief
11 under California law is brought on behalf of all members of the Class, whether or not they are
12 California residents.

13 150. Beginning on a date unknown to Plaintiff, but at least as early as June 28, 2001, and
14 continuing thereafter at least up through and including the present, Defendant committed and
15 continue to commit acts of unfair competition, as defined by Sections 17200, *et seq.* of the
16 California Business and Professions Code, by engaging in the acts and practices specified above.

17 151. This Claim is instituted pursuant to Sections 17203 and 17204 of the California
18 Business and Professions Code, to obtain restitution from the Defendant for acts, as alleged herein,
19 that violated Section 17200 of the California Business and Professions Code, commonly known as
20 the Unfair Competition Law.

21 152. The Defendant's conduct as alleged herein violated Section 17200. The acts,
22 omissions, misrepresentations, practices and non-disclosure of Defendant, as alleged herein,
23 constitute a common continuous and continuing course of conduct of unfair competition by means
24 of unfair, unlawful and/or fraudulent business acts or practices within the meaning of California
25 Business and Professions Code, Section 17200, *et seq.*, including, but not limited to, the following:

- 26 a. The violations of Section 1 of the Sherman Act, as set forth above;
27 b. The violations of Section 16720, *et seq.*, of the California Business and
28 Professions Code, set above;

1 c. Defendant's acts, omissions, misrepresentations, practices and non-
2 disclosures, as described above, whether or not in violation of Section 16720, *et seq.* of the
3 California Business and Professions Code, and whether or not concerted or independent acts, are
4 otherwise unfair, unconscionable, unlawful or fraudulent.

5 d. Defendant's act and practices are unfair to consumers of microprocessors in
6 the State of California and throughout the United States, within the meaning of Section 17200,
7 California Business and Professions Code; and

8 e. Defendant's acts and practices are fraudulent or deceptive within the
9 meaning of Section 17200 of the California Business and Professions Code.

10 153. Plaintiff and each of the Class members are entitled to full restitution and/or
11 disgorgement of all revenues, earnings, profits, compensation and benefits which may have been
12 obtained by Defendant as a result of such business acts or practices.

13 154. The illegal conduct alleged herein is continuing and there is no indication that
14 Defendant will not continue such activity into the future.

15 155. The unlawful and unfair business practices of Defendant, as described above, have
16 caused and continue to cause Plaintiff and the members of the Class to pay supra-competitive and
17 artificially-inflated prices for microprocessors. Plaintiff and the members of the Class suffered
18 injury in fact and lost money or property as a result of such unfair competition.

19 156. The conduct of Defendant as alleged in this Complaint violates Section 17200 of the
20 California Business and Professions Code.

21 157. As alleged in this Complaint, Defendant and its co-conspirators have been unjustly
22 enriched as a result of their wrongful conduct and by Defendant's unfair competition. Plaintiff and
23 the members of the Class are accordingly entitled to equitable relief including restitution and/or
24 disgorgement of all revenues, earnings, profits, compensation and benefits which may have been
25 obtained by Defendant as a result of such business practices, pursuant to the California Business
26 and Professions Code, Sections 17203 and 17204.

Fourth Claim for Relief

(Violations of State Antitrust and Unfair Competition Laws)

158. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

159. Should California law not be applied by reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Alabama Code §§ 8-10-1 *et seq.*

160. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Arizona Revised Stat. Code §§ 44-1401 *et seq.*

161. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of California Bus. & Prof. Code §§ 16700 *et seq.* and Cal. Bus. & Prof. Code §§ 17200 *et seq.*

162. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of District of Columbia Code Ann. §§ 28-4503 *et seq.*

163. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Iowa Code §§ 553.1 *et seq.*

164. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Kansas Stat. Ann. §§ 50-101 *et seq.*

165. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Maine Rev. Stat. Ann. 10, §§ 1101 *et seq.*

166. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Michigan Comp. Laws. Ann. §§ 445.773 *et seq.*

167. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Minnesota Stat. §§ 325D.52 *et seq.*

168. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Mississippi Code Ann. § 75.21.1 *et seq.*

169. By reason of the foregoing, Defendant has entered into agreements in restraint of trade in violation of Nebraska Rev. Stat. §§ 59-801 *et seq.*

1 170. By reason of the foregoing, Defendant has entered into agreements in restraint of
2 trade in violation of Nevada Rev. Stat. Ann. §§ 598A *et seq.*

3 171. By reason of the foregoing, Defendant has entered into agreements in restraint of
4 trade in violation of New Mexico Stat. Ann. §§ 57-1-1 *et seq.*

5 172. By reason of the foregoing, Defendant has entered into agreements in restraint of
6 trade in violation of North Carolina Gen. Stat. §§ 75-1 *et seq.*

7 173. By reason of the foregoing, Defendant has entered into agreements in restraint of
8 trade in violation of North Dakota Cent. Code §§ 51-08.1-01 *et seq.*

9 174. By reason of the foregoing, Defendant has entered into agreements in restraint of
10 trade in violation of Ohio Rev. Code Ann. §§ 1331.01 *et seq.*

11 175. By reason of the foregoing, Defendant has entered into agreements in restraint of
12 trade in violation of Pennsylvania common law.

13 176. By reason of the foregoing, Defendant has entered into agreements in restraint of
14 trade in violation of South Dakota Codified Laws Ann. §§ 37-1 *et seq.*

15 177. By reason of the foregoing, Defendant has entered into agreements in restraint of
16 trade in violation of Tennessee Code Ann. §§ 47-25-101 *et seq.*

17 178. By reason of the foregoing, Defendant has entered into agreements in restraint of
18 trade in violation of Vermont Stat. Ann. 9 §§ 2453 *et seq.*

19 179. By reason of the foregoing, Defendant has entered into agreements in restraint of
20 trade in violation of West Virginia §§ 47-18-1 *et seq.*

21 180. By reason of the foregoing, Defendant has entered into agreements in restraint of
22 trade in violation of Wisconsin Stat. §§ 133.01 *et seq.*

23 181. Class members in each of the states listed above paid supra-competitive, artificially
24 inflated prices for microprocessors. As a direct and proximate result of Defendant's unlawful
25 conduct, such members of the Class have been injured in their business and property in that they
26 paid more for microprocessors than they otherwise would have paid in the absence of Defendant's
27 unlawful conduct.

Fifth Claim for Relief

(Unjust Enrichment and Disgorgement of Profits)

182. Plaintiff incorporates and realleges, as though fully set forth herein, each and every allegation set forth in the preceding paragraphs of this Complaint.

183. Defendant has been unjustly enriched through overpayments by Plaintiff and Class members and the resulting profits.

184. Under common law principles of unjust enrichment, Defendant should not be permitted to retain the benefits conferred via overpayments by Plaintiff and Class members.

185. Plaintiff seeks disgorgement of all profits resulting from such overpayments and establishment of a constructive trust from which Plaintiff and Class members may seek restitution.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays:

A. That the Court determine that the Sherman Act, state antitrust law, and state consumer protection and/or unfair competition law claims alleged herein may be maintained as a class action under Rule 23(a), (b)(2), and (b)(3) of the Federal Rules of Civil Procedure;

B. That the unlawful conduct, contract, conspiracy or combination alleged herein the adjudged and decreed to be:

a. A restraint of trade or commerce in violation of Section 1 of the Sherman Act, as alleged in the First Claim for Relief;

b. An unlawful combination, trust, agreement, understanding, and/or concert of action in violation of the state antitrust laws identified in the Second and Fourth Claims for Relief herein;

c. Violations of the state consumer protection and unfair competition laws identified in the Third Claim for Relief herein; and

d. Acts of unjust enrichment as set forth in the Fifth Claim for Relief herein.

C. That Plaintiff and the Class recover damages, as provided by state antitrust laws, and that a joint and several judgment in favor of Plaintiff and the Class be entered against the Defendant in an amount to be trebled in accordance with such laws;

1 D. That Defendant, its affiliates, successors, transferees, assignees, and the officers,
2 directors, partners, agents, and employees thereof, and all other persons acting or claiming to act on
3 their behalf, be permanently enjoined and restrained from in any manner: (1) continuing,
4 maintaining, or renewing the conduct, contract, conspiracy or combination alleged herein, or from
5 entering into any other conspiracy alleged herein, or from entering into any other contract,
6 conspiracy or combination having a similar purpose or effect, and from adopting or following any
7 practice, plan, program, or device having a similar purpose or effect; and (2) communicating or
8 causing to be communicated to any other person engaged in the sale of microprocessors,
9 information concerning bids of competitors;

10 E. That Plaintiff be awarded restitution, including disgorgement of profits obtained by
11 Defendant as a result of its acts of unfair competition and acts of unjust enrichment.

12 F. That Plaintiff and members of the Class be awarded pre- and post-judgment interest,
13 and that that interest be awarded at the highest legal rate from and after the date of service of the
14 initial complaint in this action;

15 G. That Plaintiff and members of the Class recover their costs of this suit, including
16 reasonable attorneys' fees as provided by law; and

17 H. That Plaintiff and members of the Class have such other, further, and different relief
18 as the case may require and the Court may deem just and proper under the circumstances.

19 **X. DEMAND FOR TRIAL BY JURY**

20 186. Pursuant to Fed. R. Civ. P. 38(b), Plaintiff demands trial by jury of all issues so
21 triable under the law.

22 DATED: June 30, 2005.

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